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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,555	12/05/2003	Delton R. Thompson JR.	56109US011	9972

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EXAMINER	
BUTLER, PATRICK NEAL	

ART UNIT	PAPER NUMBER
1791	

NOTIFICATION DATE	DELIVERY MODE
05/06/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/728,555	THOMPSON ET AL.	
	Examiner	Art Unit	
	Patrick Butler	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 February 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Buntin et al. (US Patent No. 3,849,241) as evidenced by Mark (*Encyclopedia of Polymer Science and Engineering*, page 26).

With respect to Claim 1, Buntin teaches making melt blown non-woven webs by extruding PET at a temperature of 550 F (288 °C) or well above PET's melting point. As evidenced by Mark (*Encyclopedia of Polymer Science and Engineering*, page 26), PET's melting point is 250-260 °C. Well beyond 250-260 °C would necessarily include 280-300 °C, which is less than the claimed temperature of about 295 °C. Buntin further processes with a stream of air at 500 F (260 °C), which reads on the claimed range of less than about 260 °C given the range implied by "about", delivered at a sonic velocity

level, which is greater than 100 meters per second, and collecting the filaments into a mat (see abstract; col. 4, lines 31-45; col. 7, lines 59-64; and col. 9, lines 20-23).

While Buntin does not detail aspects of the properties of crystallization of the PET, the PET of Buntin would necessarily have chain-extended crystallization imparted to provide dimensional stability to a web of the fibers principally because Buntin teaches the same process as applicant.

Alternatively, if it is held that only Buntin's general temperature teaching of "well above" the polymer's melting point apply to the list of applicable polymers (see col. 3, lines 34-45) or if it is held that specifically PET's selection (col. 4, lines 31-45) would not have been clearly anticipated, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the broadly applicable processing temperatures (see col. 3, lines 34-45) to PET (col. 4, lines 31-45) in order to make a melt blown mat of substantially completely free of polymer shot (see abstract) out of polyester, with its inherent properties such as being hydrophobic and its thermal stability versus polyolefins or at least because of its recommended useful benefit of being used in Buntin's process (col. 4, lines 31-45).

With respect to Claim 2, Buntin teaches that the extruded resin would have about 0.6 to about 1.4 i.v., which reads on the claimed range of 0.45-0.75 i.v. (see col. 2, lines 43-58).

With respect to Claim 3, while Buntin does not detail aspects of the properties of crystallization of the PET, the PET of Buntin would necessarily exhibit a double melting peak on a DSC plot which is representative of a first molecular portion within the fiber

that comprises a non-chain-extended crystalline phase, and a second molecular portion within the fiber that comprises a chain-extended crystalline phase and melts at an elevated temperature over that of the non-chain-extended crystalline phase principally because Buntin teaches the same process as applicant.

Claim Rejections - 35 USC § 103

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buntin et al. (US Patent No. 3,849,241) as evidenced by Mark (*Encyclopedia of Polymer Science and Engineering*, page 26) as applied above to Claim 1, and further in view of Thompson et al. '081 (US Patent No. 5,841,081).

With respect to Claim 4, Buntin teaches making a nonwoven web as previously described.

Buntin does not specifically teach that additional fibers or particles are dispersed among the PET fibers before they are collected.

Thompson '081 teaches a method of making a nonwoven web by adding 15 percent or greater heat activatable staple fibers to the other fibers within the web.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add heat activatable fibers as taught by Thompson '081 within the web as taught by Buntin in order to bond the heat activatable fibers with each other and the other fibers within the web because it would provide a source area and a receiving area such that a major face of the insulation web intercepts and thereby significantly attenuates sound waves passing from the source area to the receiving area (see Thompson '081 col. 1. lines 55-63).

Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buntin et al. (US Patent No. 3,849,241) as evidenced by Mark (*Encyclopedia of Polymer Science and Engineering*, page 26) in view of Thompson et al. '322 (US Patent No. 5,958,322).

With respect to Claim 5, Buntin teaches making melt blown non-woven webs by extruding PET resin with about 0.6 to about 1.4 i.v., which reads on the claimed range of about 0.45-0.6 i.v. given the range implied by "about," at a temperature of 550 °F (288 °C) or well above PET's melting point. As evidenced by Mark (*Encyclopedia of Polymer Science and Engineering*, page 26), PET's melting point is 250-260 °C. Well beyond 250-260 °C would necessarily include 280-300 °C, which is less than the claimed temperature of about 85 °C given the range implied by "about", with a stream of air at 500 °F (260 °C), which reads on the claimed range of less than about 270 °C, delivered at a sonic velocity level, which is greater than 100 meters per second, to make fibers of 0.5 to 5 microns (micrometers) diameter, which is within the claimed range of an average diameter of about 20 micrometers or less, and collecting the filaments into a mat (see abstract; see col. 2, lines 43-58; col. 4, lines 31-45; col. 7, lines 59-64; col. 9, lines 20-23; and col. 19, lines 30-37).

Alternatively, if it is held that only Buntin's general temperature teaching of "well above" the polymer's melting point apply to the list of applicable polymers (see col. 3, lines 34-45) or if it is held that specifically PET's selection (col. 4, lines 31-45) would not have been clearly anticipated, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the broadly applicable processing

temperatures (see col. 3, lines 34-45) to PET (col. 4, lines 31-45) in order to make a melt blown mat of substantially completely free of polymer shot (see abstract) out of polyester, with its inherent properties such as being hydrophobic and its thermal stability versus polyolefins or at least because of its recommended useful benefit of being used in Buntin's process (col. 4, lines 31-45).

Buntin teaches that self-bonding can occur via various processes (see col. 19, lines 33-37) but does not explicitly teach passing the web through an oven.

Thompson '322 teaches annealing a non-woven while restrained through an oven (see abstract and col. 11, lines 53-58). As the temperature is sufficiently high to thermally bond the fibers together, the fibers would necessarily thermally bond together—autogenously bonded.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to pass a nonwoven through an oven as taught by Thompson '322 utilizing the web as taught by Buntin in order to form a dimensionally stable nonwoven fibrous web (see Thompson '322 abstract).

With respect to Claim 6, Buntin et al. in view of Thompson et al. '322 do not appear to explicitly teach that the extruder temperature is within the claimed range (e.g., less than 275 °C). However, in this regard, Buntin further teaches the total degradation is a function of the pre-extruder temperature, extruder temperature, airflow, and air temperature. As such, Buntin obvious recognizes that extruder temperature is a result-effective variable. Since the extruder temperature would be a result-effective variable, one of ordinary skill in the art would have obviously determined the optimum the

extruder temperature applied in the process of Buntin et al. in view of Thompson et al. ‘322 through routine experimentation based upon total desired thermal degradation and its related viscosity.

With respect to Claim 7, Buntin teaches that the speed of the air is at sonic velocity levels, which is included within the claimed range of at least 150 meters per second (see col. 9, lines 20-23).

With respect to Claim 10, Buntin teaches that thermoplastic polymer of the web can include PET and other polymers as a mixture (see col. 4, lines 32-42).

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buntin et al. (US Patent No. 3,849,241) in view of Thompson et al. ‘322 (US Patent No. 5,958,322) as evidenced by Mark (*Encyclopedia of Polymer Science and Engineering*, page 26) as applied to Claim 5 above, and further in view of Thompson et al. ‘081 (US Patent No. 5,841,081)

With respect to Claim 8, Buntin in view of Thompson et al. ‘322 teaches making a nonwoven web as previously described.

Buntin in view of Thompson et al. ‘322 does not specifically teach that additional fibers or particles are dispersed among the PET fibers before they are collected.

Thompson ‘081 teaches a method of making a nonwoven web by adding 15 percent or greater heat activatable staple fibers to the other fibers within the web.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add heat activatable fibers as taught by Thompson ‘081 within the web as taught by Buntin in view of Thompson et al. ‘322 in order to bond the heat

activatable fibers with each other and the other fibers within the web because it would provide a source area and a receiving area such that a major face of the insulation web intercepts and thereby significantly attenuates sound waves passing from the source area to the receiving area (see Thompson ‘081 col. 1. lines 55-63).

With respect to Claim 9, Thompson ‘081 teaches that the heat activatable fibers added to the PET fibers are in staple form (see col. 1, lines 66 through col. 2, line 2).

Claims 1-3 are rejected under 35 USC 103(a) as being unpatentable over Buntin (US Patent No. 3,849,241) in view of admitted prior art (Application No. 09/716,790, Paper No. 7, 12 December 2002) as evidenced by Mark (*Encyclopedia of Polymer Science and Engineering*, page 26).

With respect to Claim 1, Buntin teaches making melt blown non-woven webs by extruding PET at a temperature of 550 F (288 °C) or well above PET’s melting point. As evidenced by Mark (*Encyclopedia of Polymer Science and Engineering*, page 26), PET’s melting point is 250-260 °C. Well beyond 250-260 °C would necessarily include 280-300 °C, which is less than the claimed temperature of about 295 °C. Buntin further processes with a stream of air at 500 F (260 °C), which reads on the claimed range of less than about 260 °C given the range implied by “about”, delivered at a sonic velocity level, which is greater than 100 meters per second, and collecting the filaments into a mat (see abstract; col. 4, lines 31-45; col. 7, lines 59-64; and col. 9, lines 20-23).

While Buntin does not detail aspects of the properties of crystallization of the PET, the PET of Buntin would necessarily have chain-extended crystallization imparted

to provide dimensional stability to a web of the fibers principally because Buntin teaches the same process as applicant.

Alternatively, if it is held that only Buntin's general temperature teaching of "well above" the polymer's melting point apply to the list of applicable polymers (see col. 3, lines 34-45) or if it is held that specifically PET's selection (col. 4, lines 31-45) would not have been clearly anticipated, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the broadly applicable processing temperatures (see col. 3, lines 34-45) to PET (col. 4, lines 31-45) in order to make a melt blown mat of substantially completely free of polymer shot (see abstract) out of polyester, with its inherent properties such as being hydrophobic and its thermal stability versus polyolefins or at least because of its recommended useful benefit of being used in Buntin's process (col. 4, lines 31-45).

Buntin does not expressly disclose that the process makes a PET with a double melting peak.

Admission discloses "meltspun oriented PET fibers that exhibit such characteristics" as a "dual melting peak" "with a second melting peak representative of a molecular portion 'in chain-extended crystalline form and [having a melting point elevated over that of the non-chain-extended crystalline form'" (Application No. 09/716,790, Paper No. 7, 12 December 2002, Page 3, 5th complete paragraph).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make Applicant's admittedly known fiber into a web by using Buntin's controllable variables within the PET web-making process in order to have a

PET web process that successfully makes the known fibers into web at a high polymer throughput (industrial productivity) (see Buntin abstract and col. 4, lines 31-45).

With respect to Claim 2, Buntin teaches that the extruded resin would have about 0.6 to about 1.4 i.v., which reads on the claimed range of 0.45-0.75 i.v. (see col. 2, lines 43-58).

With respect to Claim 3, while Buntin does not detail aspects of the properties of crystallization of the PET, the PET of Buntin would necessarily exhibit a double melting peak on a DSC plot which is representative of a first molecular portion within the fiber that comprises a non-chain-extended crystalline phase, and a second molecular portion within the fiber that comprises a chain-extended crystalline phase and melts at an elevated temperature over that of the non-chain-extended crystalline phase principally because Buntin teaches the same process as applicant and per admission by applicant that it is known to make the PET fiber.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buntin (US Patent No. 3,849,241) in view of admitted prior art (Application No. 09/716,790, Paper No. 7, 12 December 2002) as evidenced by Mark (*Encyclopedia of Polymer Science and Engineering*, page 26) as applied above to Claim 1, and further in view of Thompson et al. '081 (US Patent No. 5,841,081).

Buntin in view of Applicant's admission does not specifically teach that additional fibers or particles are dispersed among the PET fibers before they are collected.

Thompson '081 teaches a method of making a nonwoven web by adding 15 percent or greater heat activatable staple fibers to the other fibers within the web.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add heat activatable fibers as taught by Thompson ‘081 within the web as taught by Buntin in view of Applicant’s admission in order to bond the heat activatable fibers with each other and the other fibers within the web because it would provide a source area and a receiving area such that a major face of the insulation web intercepts and thereby significantly attenuates sound waves passing from the source area to the receiving area (see Thompson ‘081 col. 1. lines 55-63).

Claims 5-7 and 10 are rejected under 35 USC 103(a) was being unpatentable over Buntin (US Patent No. 3,849,241) in view of admitted prior art (Application No. 09/716,790, Paper No. 7, 12 December 2002) and Thompson et al. ‘322 (US Patent No. 5,958,322) as evidenced by Mark (*Encyclopedia of Polymer Science and Engineering*, page 26).

Buntin teaches making melt blown non-woven webs by extruding PET resin with about 0.6 to about 1.4 i.v., which reads on the claimed range of about 0.45-0.6 i.v. given the range implied by “about,” at a temperature of 550 °F (288 °C) or well above PET’s melting point. As evidenced by Mark (*Encyclopedia of Polymer Science and Engineering*, page 26), PET’s melting point is 250-260 °C. Well beyond 250-260 °C would necessarily include 280-300 °C, which is less than the claimed temperature of about 285 °C. Buntin further processes with a stream of air at 500 °F (260 °C), which reads on the claimed range of less than about 270 °C, delivered at a sonic velocity level, which is greater than 100 meters per second, to make fibers of 0.5 to 5 microns (micrometers) diameter, which is within the claimed range of an average diameter of

about 20 micrometers or less, and collecting the filaments into a mat (see abstract; see col. 2, lines 43-58; col. 4, lines 31-45; col. 7, lines 59-64; col. 9, lines 20-23; and col. 19, lines 30-37).

Buntin does not expressly disclose a PET with a double melt peak.

Admission discloses “meltspun oriented PET fibers that exhibit such characteristics” as a “dual melting peak” “with a second melting peak representative of a molecular portion ‘in chain-extended crystalline form and [having a melting point elevated over that of the non-chain-extended crystalline form’” (Application No. 09/716,790, Paper No. 7, 12 December 2002, Page 3, 5th complete paragraph).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make Applicant’s admittedly known fiber into a web by using Buntin’s controllable variables within the PET web-making process in order to have a PET web process that successfully makes the known fibers into a web at a high polymer throughput (industrial productivity) (see Buntin abstract and col. 4, lines 31-45).

Buntin in view of Applicant’s admission teaches that self-bonding can occur via various processes (see Buntin col. 19, lines 33-37) but does not explicitly teach passing the web through an oven.

Thompson ‘322 teaches annealing a non-woven while restrained through an oven (see abstract and col. 11, lines 53-58). As the temperature is sufficiently high to thermally bond the fibers together, the fibers would necessarily thermally bond together—autogenously bonded.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to pass a nonwoven through an oven as taught by Thompson '322 utilizing the web as taught by Buntin in view of Applicant's admission in order to form a dimensionally stable nonwoven fibrous web (see Thompson '322 abstract).

With respect to Claim 6, Buntin in view of Applicant's admission and Thompson et al. '322 do not appear to explicitly teach that the extruder temperature is within the claimed range (e.g., less than 275 °C). However, in this regard, Buntin further teaches the total degradation is a function of the pre-extruder temperature, extruder temperature, airflow, and air temperature. As such, Buntin obvious recognizes that extruder temperature is a result-effective variable. Since the extruder temperature would be a result-effective variable, one of ordinary skill in the art would have obviously determined the optimum the extruder temperature applied in the process of Buntin in view of Applicant's admission and Thompson et al. '322 through routine experimentation based upon total desired thermal degradation and its related viscosity.

With respect to Claim 7, Buntin teaches that the speed of the air is at sonic velocity levels, which is included within the claimed range of at least 150 meters per second (see col. 9, lines 20-23).

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Claims 8 and 9 are rejected under 35 USC 103(a) was being unpatentable over Buntin (US Patent No. 3,849,241) in view of admitted prior art (Application No. 09/716,790, Paper No. 7, 12 December 2002) and Thompson et al. '322 (US Patent No.

5,958,322) as evidenced by Mark (*Encyclopedia of Polymer Science and Engineering*, page 26) as applied to Claim 5 above, and further in view of Thompson et al. ‘081 (US Patent No. 5,841,081)

With respect to Claim 8, Buntin in view of Applicant’s admission and Thompson et al. ‘322 teaches making a nonwoven web as previously described.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to add heat activatable fibers as taught by Thompson ‘081 within the web as taught by Buntin in view of Applicant’s admission and Thompson et al. ‘322 in order to bond the heat activatable fibers with each other and the other fibers within the web because it would provide a source area and a receiving area such that a major face of the insulation web intercepts and thereby significantly attenuates sound waves passing from the source area to the receiving area (see Thompson ‘081 col. 1. lines 55-63).

With respect to Claim 9, Thompson ‘081 teaches that the heat activatable fibers added to the PET fibers are in staple form (see col. 1, lines 66 through col. 2, line 2).

Response to Arguments

Applicant's arguments filed 04 February 2008 have been fully considered but they are not persuasive.

Applicant argues with respect to the 35 USC 102(b) rejections. Applicant's arguments appear to be on the grounds that:

1) The provided samples in the interview 23 January 2008 indicate the success of the claimed invention in providing claimed dimensional stability.

2) The shrunken sample illustrates the long-standing deficiency of the prior art to overcome dimensional stability in melt-blown PET. The specification is relied upon as evidence of such conclusions.

3) Buntin failed to solve dimensional stability issues solved by Applicant since Buntin pertains to degrading of polymers.

4) Applicant's steps of extruding molten within the claimed temperature, low air temperature, and high air velocity because Buntin fails to teach a range for PET, fails to teach imparting chain-extended crystallization, and degrades the polymer rather that impart chain extended crystallization.

5) Buntin does not contain specific temperatures applicable to PET for extrusion and degradation. Thus, Buntin's teachings are incomplete with respect to PET for lacking such temperature descriptions.

The Applicant's arguments are addressed as follows:

1 and 2) Although the samples were considered, since the record is not clear regarding the parameters of production of the samples, the arguments of counsel

cannot take the place of evidence in the record. Specifically, it is not clear where within the claimed parameters the production parameters occurred.

2) The Specification appears to not be based on evidence of the references' products but rather opinion to their performance (see page 3, lines 19-21). Thus, appropriate weight is given to the opinion evidence. No factual evidence has been made of record showing the performance of prior art meltblown products' dimensional stability.

2) There is no evidence that if persons skilled in the art who were presumably working on the problem knew of the teachings of the above cited references, they would still be unable to solve the problem. See MPEP § 716.04.

3-5) As shown in Applicant's attached reference filed 16 November 2006, *Encyclopedia of Polymer Chemistry*, volume 4, pages 652-3 (Attachment M), Tables 10 and 11, PET degrades above 105 °C. Buntin teaches heating the polymer to a temperature in excess of about 550 °F (288 °C) (see col. 7, lines 23-26 and 59-64). Applicant's claimed temperature is less than about 295 °C. PET at about 550 °F (288 °C) would be:

- within Buntin's temperature range (in excess of about 550 °F (288 °C) (see col. 7, lines 23-26 and 59-64)),
- within Buntin's teaching of degradation (see col. 3, lines 37-47), and
- within applicant's claimed range (less than about 295 °C).

Thus, Buntin's teaching of degradation of PET would overlap with all of the range of Buntin's temperature range. Since these temperatures taught by Buntin's overlap the

same process conditions as Applicant's claimed process, the processes would necessarily have the same results.

3) Moreover, it is unclear that degradation would prohibit crystallization via an assumption of mutually exclusivity. Absent such conclusion, Buntin would not be assumed to not teach crystallization as a result of degradation occurring.

4) Buntin is relied upon to teach the claim limitation of "provid[ing] dimensional stability to a web of the fibers" principally because Buntin teaches the step of extruding at the claimed polymer temperature and air temperature and speed as cited upon above. It is noted that the claim limitation of "provid[ing] dimensional stability to a web of the fibers" is not a separate step from extruding.

5) The examples of Buntin do not include PET; however Buntin's Claim 1 does include it as a thermoplastic polymer resin. Analogously, it may be seen that the examples and their ranges are not considered limitations as to the polymer nor the temperature. Therefore, Buntin is relied upon for all that the reference teaches, specifically the polymers and ranges that the reference teaches.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Butler whose telephone number is (571) 272-8517. The examiner can normally be reached on Mon.-Thu. 7:30 a.m.-5 p.m. and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. B./
Examiner, Art Unit 1791

/Monica A Huson/
Primary Examiner, Art Unit 1791